

## **REMARKS**

The Applicant has filed the present Response in reply to the outstanding Official Action of May 20, 2004, and the Applicant believes the Response to be fully responsive to the Official Action for reasons set forth below in greater detail.

At the onset, Applicant would like to express our appreciation for the Examiner's indication that Claims 3, 5-7, 13, 14, 16-18 have allowable subject matter and would be allowed if rewritten in independent form including all of the limitation of the base claim and any intervening claim in addition to overcoming the 35 U.S.C. § 112 rejection. We would like to note that the Applicant agrees with the Examiner's suggested amendments for Claims 2, 4-11, 13, and 15-22.

The Examiner also rejected Claims 1, 2, 8, 11-13, 19 and 22 under 35 U.S.C. §102(e) as being anticipated by Gagnon. Claims 1 and 12 have been amended herewith. The amendment incorporates the subject matter of allowable Claims 3 and 14 into Claim 1 and 12, respectively. Applicant submits that the above amendment overcomes the Examiner's rejection to Claim 1 and 12 pursuant to 35 U.S.C. §102(e) as being anticipated by Gagnon.

Amended Claim 1 recites, *inter alia*, a self orthogonal code decoding circuit for decoding a self orthogonal code and repeating decoding of said orthogonal code for a plurality of times using a plurality of decoding stages, wherein for each of said plurality of stages, a reception series error detection threshold value for detecting a reception series error is set to a predetermined value and in a first decoding stage, said reception series error detection threshold value is set high for detecting a reception series error only if there is a high probability of error and the threshold values are gradually lowered in each successive decoding stage, for error detection when there is a lower probably of error.

Applicant submits that amended Claims 1 and 12 are patentably distinct from the cited prior art references in that the prior art references fail to teach, at least the fact that the threshold values for each of the plurality of decoding stage is gradually reduce to improve error correction performance.

Furthermore, Applicant submits that Claims 8 and 11 are patentable for at least the same reason as applied to Claim 1.

In addition, the Examiner rejected Claims 2 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Gagnon.

Gagnon discloses a plurality of decoding stages 26 for use in self orthogonal coding and decoding. Each decoding stage contains a shift register 41 to delay the parity bit. The parity bit S is supplied to threshold logic and then to a XOR gate. The other input to the XOR gate is the input data. Gagnon fails to teach omitting the parity bit output in the final decoder stage. However, the Examiner asserts that it would have been obvious to a person having ordinary skill in the art to leave the parity output line of Gagnon's convolutional parity decoder's final stage disconnected because there is no need for the parity bit after parity decoding is complete.

We respectfully disagree that it would be obvious to modify or eliminate the output line in the final stage of a parity decoder since the prior art does not teach or suggest this modification. The Examiner has not cited any prior art reference that teaches this modification of the reference nor cited any proper motivation.

We would also like to note that Claims 4 and 15 have been amended to depend from Claims 1 and 12, respectively. Applicant submits that the amendment obviates the

Examiner's rejections of Claims 4 and 15 as set forth in paragraph 8 of the outstanding Office Action. Since the claims now depend upon amended Claims 1 and 12, which Applicant submits contain allowable subject matter, Claims 4 and 15 are patentable for at least the same reasoning as is aforementioned regarding said independent claims. No new matter is added by the amendments.

Applicant also submits that the Examiner's rejection of Claims 9, 10, 20 and 21 is obviated by the amendments to Claims 1 and 12, respectively, which incorporate the subject matter of allowable Claims 3 and 14. Furthermore, Claim 5 has been amended to depend from Claim 1 instead of cancelled Claim 3.

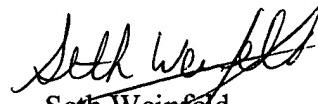
Lastly, the Examiner objected to the disclosure because it contains several informalities, as the specification echoed the language of the claims which the Examiner amended. Accordingly, the specification has been correspondingly amended to conform the language of the specification to the amended claims. No new matter was added to the specification. Applicant respectfully submits herewith a substitute specification for the Examiner to review and examine.

Based upon the foregoing amendments and arguments, Applicant respectfully requests the Examiner to withdraw the rejection of Claims 1-2, 8, 11-13, 19 and 22 under 35 U.S.C. § 102(e). Furthermore, Applicant respectfully requests the Examiner to withdraw the rejections of Claims 2, 4, 9-10, 13, 15, 20-21 under 35 U.S.C. § 103(a). Lastly, Applicant respectfully requests the Examiner to withdraw the rejection of Claims 1-22 under 35 U.S.C. §112, second paragraph and the objection to the specification of the application.

In conclusion, the Applicant believes that the above-identified application is in condition for allowance and henceforth respectfully solicits the Examiner to allow the

application. If the Examiner believes a telephone conference might expedite the allowance of this application, the Applicant respectfully requests that the Examiner call the undersigned, Applicant's attorney, at the following telephone number: (516) 742-4343.

Respectfully submitted,



Seth Weinfeld  
Registration No: 50,929

SCULLY, SCOTT, MURPHY & PRESSER  
400 Garden City Plaza  
Garden City, New York 11530  
Telephone: (516) 742-4343  
SW:ng